A perennial objection against historical materialism is that that which is determined seems capable of becoming independent and developing a life of its own. Further, through its independence, it seems capable of conditioning and affecting the determining elements. Not to admit this seems to fly in the face of the facts. But to admit it seems paradoxical. 'Determine' seems to lose all of its intelligible force, if that which is determined conditions the existence of the determining elements, and affects the latter's development. I think, however, that G. Cohen has made sense of such a determinist thesis, which retains a degree of explanatory power. All the same, I have reservations concerning his reconstruction of historical materialism. For it is not clear that the determining and determined elements of a society can be sharply distinguished. And it is not clear that the degree of explanatory power which the determinist thesis retains is sufficient to ground historical materialism.

One of the most distinctive features of Cohen's interpretation of Marx is that he distinguishes three main strata in society (i.e. the forces of production, the relations of production, and the superstructure), rather than the usual two (i.e. the economic base and its superstructure). Distinguishing the forces of production from relations of production is advantageous for the following reason. The notion 'forces of production' seems capable of more precision than does talk of a society's entire economic structure. And this greater precision would lend itself to theorizing about societal development.

In what follows, I will be concerned with the following determinist thesis: The forces of production of a society determine the society's relations of production. The reasons for this restriction are the following. (1) A short paper can only begin to ade-
quately cover the way that one aspect of society might determine another aspect of that society. (2) The problems that arise respecting the thesis with which I will be concerned are of the sort which arise with similar Marxian theses; e.g. that the legal, political, ideological, etc. structures of a society are determined by the society's economic base. In particular, if sense can be made of the thesis that the relations of production are determined by the forces of production, even though the former condition and interact with the latter, then it might be plausible to think that sense can be made of similar Marxian theses. As such, if the problems involved in the thesis with which I am concerned can be resolved, then it would be at least coherent that problems involved in the general theory of historical materialism can be resolved, mutatis mutandis. (3) As mentioned already, this thesis seems to lend itself to greater precision than the other Marxian theses.

If the thesis that relations of production are determined by forces of production is empirically testable, then the concepts 'relations of production' and 'forces of production' must be legitimized empirical concepts. Let me begin, then, by discussing these two concepts.

If the Marxian analysis of societies and their development is a scientific analysis, then a delineation of the structure of societies in general (or of a particular sort of society) would be in order. A detailed examination as to exactly which institutions or features of institutions belong to the relations of production and the productive forces would be called for. Rather than being concerned with this, however, I will follow Cohen's (and W. Shaw's) rather rough analysis. Forces of production are sub-divided into the two broad categories of means of production and labor power. Means of production, in turn, are sub-divided into the instruments of production and the object of production. 'Object of production' is to be understood to include both that which is given by nature, and that which has been previously worked on by man. Relations of production sub-divide into the two broad categories of ownership relations and work relations.

Instead of delineating a taxonomy of productive forces and relations of production, I will try to explicate the distinction itself. The rough distinction seems to be between material and non-material factors involved in the production process. But it is not
clear how 'material factor' should be understood. The emphasis might be on 'material' or on 'non-material.'

Cohen characterizes 'productive force' as a force whose 'facility must be capable of use by a producing agent in such a way that production occurs (partly) as a result of its use, and it is someone's purpose that the facility so contribute to production'.[1] The key word is 'use'. Laws, governments, ideologies might condition and promote production, but Cohen claims that they are not used to promote production. If they are used 'to get men to produce, they are means not of production but of motivating producers'.[2]

This is a rather subtle distinction. Further, it is not clear that this linguistic criterion will capture everything and only that which Cohen wants. What Cohen wants is something like this. Technological expertise, skill, experience, etc., must be part of the forces of production; for on Cohen's view, this is a primary driving force behind historical change.

Two marks of productive forces are that (1) they are material, and (2) they are independent of social relations. In producing some φ-type thing, the productive forces are those factors which are material, and which can be transposed to a different sort of society under different sorts of ownership relations and still remain the same. But this, of course, raises the questions: (a) how 'material' should be construed; and (b) how one is to know whether factors in new ownership relations are the same factors as they were in the old ownership relations.

Suppose 'material factors' is construed as factors which can be understood strictly in terms of physical properties, with 'physical properties' understood as those properties with which a physicist or chemist is concerned. Then the raw materials and tools used would presumably fall under 'material factors.' On the other hand, assuming a non-materialist theory of the mind, technological expertise, skill, experience, etc. are not material factors. Further, technological expertise seems necessarily social, embedded in a society of technicians.

Suppose, then, that the emphasis in the contrast between material/non-material is on non-material. And suppose that the contrast is not concerned with social factors per se, but rather ownership factors. This would seem to capture what Cohen wants. For he seems to want to claim: (1) that technological expertise is a primary innovative force behind historical change; (2) that ownership relations fetter this innovative force in such a way that a disruptive change occurs,
leading to a newly structured society, with new ownership relations; and (3) that this dynamism between technological innovation and ownership relations is responsible for all (or at least most) of the more dramatic changes in history.

Now, clearly, this would require a great deal of showing. For the moment, however, I am simply concerned with whether the distinction between material and non-material factors is viable. If the non-material factors are identified with the ownership relations, then what about their opposites, the material factors? Are they to include everything which is left? Well, not everything. For factors in the superstructure presumably do not belong in the forces of production. Suppose, then, that the material factors include everything which is left in the base. But then what exactly is the distinction between base and superstructure?

To cut this short, suppose the relations of production are equated with ownership relations, and the forces of production are equated with physical factors together with technological expertise. Isn't this a clear distinction? Not exactly; since it is not clear that the technological expertise is entirely independent from the ownership relations of a production process. Nor is it clear that when the ownership relations are changed that the technological expertise itself is not changed. In short, it is not clear that these factors in the production process can be neatly isolated and construed as independent factors. Further, if the relations of production are identified with ownership relations, and the forces of production identified with physical and technological factors, then this seems far afield from Marx himself. For Marx entertained a much richer account of historical change than that!

With these reservations concerning the concepts 'relations of production' and 'forces of production,' let me now turn to the determinist thesis. I will (1) examine how Marx understood the thesis; (2) examine Cohen's interpretation of the thesis; (3) consider whether a functional explanation can resolve one of the thesis' main difficulties; and (4) consider how ultimate the determinist thesis is, if functional explanations are only 'half-way' explanations.

I will only be concerned with the following of Marx's writings: The Preface to A Contribution to the Critique of Political Economy, the Introduction to The Grundrisse, and Part I of The German Ideology. Let me say, before I begin, that I do not think Marx, Cohen or
Shaw want to deny that relations of production can interact with the productive forces.

Cohen (and Shaw) draws heavily on The Preface to support his interpretation of historical materialism. As such, his interpretation of Marx is close to this text of Marx. A natural question, however, is to what extent The Preface reflects Marx's other writings on historical materialism. Before doing that, however, let me note three points about the Preface. First, as Cohen (and Shaw) emphasizes, the general determinist thesis that a society's superstructure is determined by its economic base is distinguished from the thesis that forces of production determine relations of production. In fact, Marx says that the material transformations 'can be determined with the precision of natural science,' whereas the other determinist theses are not as precise.[3] Second, the forces/relations of production contrast seems to be a material/non-material contrast. Third, neither of these concepts is explicated in detail.

The German Ideology is one of the earliest texts in which Marx puts forth the general determinist thesis. Let me merely make five points about this text. First, as the title suggests, Marx is mainly interested in trying to show that history is 'under the sway' of material forces, rather than 'under the sway of ideas', pace the Hegelians and Utopian Socialists. As such, Marx is mainly concerned with the thesis that material factors of a society determine the prevailing ideology of the society.

Second, Marx uses the term 'forms of intercourse' rather than 'relations of production'; and his use of the former is not quite the same as Cohen's use of the latter. Marx takes division of labor as a force of production.[4] But for Cohen (and Shaw) it is a social work relation, and as such a relation of production.[5]

Third, at the end of Part I of the The German Ideology, Marx sums up a number of concrete analyses of a number of societies with a determinist thesis which is quite close to the thesis given in the Preface. He writes

These various conditions [appertaining to forms of intercourse] which appear first as conditions of self-activity, later as fetters upon it, form in the whole evolution of history a coherent series of forms of intercourse, the coherence of which consists in this: in the place of an earlier force of intercourse, which has become a fetter, a new one is put, corresponding to the
more developed productive forces and, hence, to the advanced mode of the self-activity of individuals—a form which in its turn becomes a fetter and is then replaced by another. Since these conditions correspond at every state to the simultaneous development of the productive forces, their history is at the same time the history of the evolving productive forces taken over by each new generation, and is, therefore, the history of the development of the forces of the individuals themselves.[6]

And

Thus all collisions in history have their origin, according to our view, in the contradiction between the productive forces and the forms of intercourse.[7]

Fourth, although Marx intends this to summarize his concrete analysis, in fact the analyses are quite rich, in that a variety of disparate sorts of things affect one another. In particular, the forms of intercourse seem to affect the productive forces almost to the extent that the latter affect the former.

Fifth, technological development, although a factor, is by no means the predominant factor in the forces of production.

In the Introduction to the Grundrisse, Marx again gives a number of concrete analyses of societal developments, and again he sums up these analyses with an analogous determinist thesis, that productive forces predominate over all other aspects of a society. Here, however, the thesis is tempered. For he explicitly notes that these other aspects influence the productive forces.

A definite form of production thus determines the forms of consumption, distribution, exchange, and also the mutual relations between these various elements. Of course, production in its one-sided form is in its turn influenced by other elements.[8]

As such, instead of there being a 'one-way' causal relation, the forces of production and relations of production form a dialectic.[9]

The Introduction to the Grundrisse might best be seen as a dialectic between a Hegelian analysis of social development and an analysis similar to the clas-
sical British economists. Marx criticizes Smith, Ricardo, et al. for lacking an historical perspective. And he criticizes the Hegelians for being unscientific. The upshot seems to be that Marx considers his analysis to be both historically minded and scientific.

The success of Marx's historical materialism as a legitimate analysis of history might rise or fall on whether Marx adequately combines these two concerns; or, perhaps, on whether these two concerns can be combined. If historical materialism is a genuinely scientific thesis ('scientific' in the sense that causal laws and dispositional properties are analyzed roughly along the lines of Hempel), then it is not clear why extra historical considerations would be relevant. Suppose the forces of production causally determine relations of production, which in turn causally determine the society's superstructure, according to empirically determined laws; and that the forces of production and relations of production can be clearly distinguished. Then it should be merely a matter of applying the appropriate laws to determine how the relations of production and the superstructure of the society will develop. For this reason, I am inclined to think that a dialectic between a scientific analysis and historical considerations is misplaced. That is, if historical materialism really were scientific, then Marx's concern with having an adequate historical perspective would be misplaced. But I do not want to argue for this.

Instead, I want to suggest that there might be a legitimate dialectic between historical considerations and an analysis which would explain general historical tendencies. If such an analysis can produce genuine explanations, the determinist thesis concerning forces and relations of production might have some teeth in it. It might be plausible that the forces determine the relations of production, in some fairly strong sense of 'determine'. All the same, such an analysis could not be mechanically applied. An application of the general analysis to a concrete situation would require an understanding of that historical situation.

I would suggest that the determinist thesis concerning the forces and relations of production, understood along these lines, might be a legitimate thesis. Let me now partially reconstruct Cohen's argument for the thesis.

Roughly, the argument proceeds in two stages: (1) the forces of production of a society tend to develop in a certain way; (2), the development of the forces of production explain the development of the relations of
production. As mentioned earlier, Cohen supports both (1) and (2) by appealing to human nature. Man is naturally inventive, and he will tend to invent more efficient instruments of production. Further, men tend to prefer more efficient instruments of production. As such, there is a tendency for the forces of production to develop and outstrip existing relations of production. This sets up a tension in society which is resolved by either reverting to earlier forces of production or by changing the relations of production. But given the human tendency to prefer more efficient instruments of production, societies tend to develop in such a way that the relations of production follow the forces of production. [10]

As it stands, this argument is much too weak. An analogous argument—again based on human nature—might be constructed as follows: (1') societal relations are inherently unstable, and therefore they have a tendency to change; (2') being basically conservative, men prefer to keep existing institutions rather than change them. As such, there is a tendency for societal relations to break down, putting the society off balance. This is set right by the society changing its forces of production to correspond with its relations of production. But, given human inertia, the forces of production lag behind.

(1') and (2') are nearly contradictory. What keeps them from being contradictory is the weakness of 'tendency' and 'prefer'. For it does not seem contradictory (or at least it is not entirely clear that it is contradictory) that a person (or a society) could have contradictory tendencies at the same time. But this weakness in my rather facetious argument is also a weakness in Cohen's argument. And as it stands, mere human preferences and tendencies would not seem capable of grounding a determinist thesis.

Cohen tries to strengthen his argument with what he considers an historical fact: 'That societies rarely replace superior productive forces by inferior ones'. [11] As such, the second human tendency is more than a tendency. It is a disposition which is rarely defeated by other dispositions.

Even if we grant that Cohen's purported historical fact is really a fact, it is not clear how strong the argument is. Let me make three points. First, the argument is to an extent still based on what Cohen takes to be human nature. This is somewhat ironical, given a traditional Marxian suspicion of a purported human nature. Human needs change in different societies. All the same, there might be an invariant human nature
structuring these changing needs. As Cohen points out, Marx at least entertained this possibility.[12]

Second, man's inventiveness might induce a tendency for development in the forces of production. But how strong this tendency is depends on how large a role technology plays in the forces of production. Prima facie, it would seem to be only one of a number of factors in the development of the productive forces.

Third, taken as a whole, it is not clear how strong the argument is. In particular, it is not clear that it can support a determinist thesis.

If, however, Cohen's argument (or a similar argument) can support a determinist thesis, the Marxian analysis of history becomes coherent and perhaps even plausible. For I think Cohen has successfully resolved one of its perennial difficulties: that if the forces determine the relations of production, how is it possible that the latter can condition and affect the former?

Briefly, I take Cohen to be arguing that the development of forces of production functionally explains changes in relations of production. And although such functional explanations are not 'rock-bottom' explanations, they are genuinely explanatory.

For Cohen, the interaction between relations and forces of production is not a problem, but an integral part of the explanation why the latter determines the former. The relations condition and promote the forces. Certain sorts of productive forces could not exist in a society without certain kinds of social relations. The relations can further the development of the forces. They can affect the direction of the development. And finally, relations of production appropriate to earlier forces of production can fetter later developments in the forces of production. For example, the centralization of capital might initially be necessary for capitalist productive forces to come into existence. Further centralization might further the development of the productive forces. But eventually (supposedly) monopolies become a fetter of the productive forces. Despite this interaction, Cohen can still say that the productive forces determine the relations of production. For instance, he can say that the productive relations which tend to exist are those which are appropriate to the existing forces of production, or to the previously existing forces of production.

Cohen characterizes the functional explanation as having the following form: "The productive relations are of kind R at time t because relations of kind R are
suitable to the use and development of the productive forces at \( t \), given the level of development of the latter at \( t \). \([13]\) This will have to be amended a bit. The relations of production may have been appropriate for the previous (or fairly recent preceding) forces of production. As such, the claim of the predominance of the forces of production is coherent. For even though the forces may be conditioned and affected by relations of production, these relations exist because they are (or were) appropriate to a certain level of development. For this reason, Cohen can say "the [productive] forces would not develop as they do were the relations different, but that is why the relations are not different--because relations of the given kind suit the development of the forces." \([14]\)

Now the mere fact that certain relations of production were suited to the development of the forces of production would not, by itself, seem to explain why the former existed. For presumably other relations of production, which did not exist, might have been equally suitable. Still, the following might suggest that the Marxian account of history is genuinely explanatory. Suppose that:

1. A rich, concrete analysis of history suggested that certain relations of production came into existence because they were suited to the development of the productive forces.
2. A general principle seemed present in many of the more dramatic historical changes; i.e. the principle that technological innovations being fettered by ownership relations set up tensions in societies which are resolved by changing the relations of production.
3. This general principle was further supported by psychological and sociological facts.
4. A more rigorous explanation of the more dramatic historical changes was not available.
5. At a later date, the general principle led to a deeper, more rigorous explanation.

If each of these points were the case, then it would be plausible that the Marxist account was genuinely explanatory.

An analogous functional account is the Darwinian theory of evolution; i.e. that creatures with struc-
tural features appropriate to a particular competitive environment are better able to survive; if the environment changes, the creatures with the structural features appropriate to the changed environment are better able to survive. The Darwinian explanation is functional in that it claims that there is a general, long-term tendency for creatures to adapt to their environment. Clearly there is interaction between the creatures and their environment; the creatures affect their environment. All the same, the Darwinian account in which changes in the environment determine changes in the anatomy of the creatures is a better account than one which would explain changes in the environment in terms of changes in the creature's anatomy. But this explanation is only a 'half-way' explanation. In the 'rock-bottom' explanation, the creature's tissue and its environment are both of the same kind, and are subject to the same causal laws. The 'rock-bottom' explanation would locate the mechanism (in this case genes) which cause the creature's anatomy to adapt. If the 'rock-bottom' explanation is available, the functional explanation is more or less useless. But if the more adequate explanation is not available, the functional explanation is legitimately explanatory. For in part it serves in the discovery of the deeper explanation.

But suppose that the last point was not fulfilled. Suppose in fact that a deeper more rigorous study suggested that the Marxist thesis was illusory. Should we say that the previous account had been explanatory, but was not explanatory now? Or should we say that the previous account only seemed explanatory, but in fact was not? This is a nice epistemological question. And I will leave it as that. For I am not so much interested in defending the Marxist thesis as I am in showing that it is at least sensible.

Suppose then that historical materialism is analogous to a Darwinian theory. If a rock-bottom explanation why relations of production develop is not available, then a functional explanation might be legitimate. Suppose it is plausible that the relations of production develop because they are suited to the existing forces of production. Then the latter might be said to explain the former; and if the explanation is sufficiently strong, the latter might be said to determine the former, even though the one is necessary for the other, and vice versa.

But the following point should be noted. Since the explanation is only functional, it is incumbent to look
for deeper explanations. And prima facie, the forces of production would not show up in a deeper explanation.

But a Marxist might be able to live with this. To begin with, he is primarily interested in the practical value of his theory. Thus, if his theory can make it fairly clear that certain relations of a society fetter the further development of the forces of production, he need not be overly concerned with details. Second, as I suggested earlier, historical materialism seems to be a legitimate analysis of history only if it is not terribly scientific. One of its virtues is that it is a dialectical analysis, combining a detailed concrete understanding of the society under investigation with a general analysis of historical change. If the analysis became genuinely scientific, the dialectic would become otiose. As such, if the Marxist analysis is legitimate, it must remain at a 'half-way' level.

The concepts 'forces of production' and 'relations of production' are somewhat suspect. And in that the general Marxian analysis seems to be concerned with long-term tendencies, it is not clear that the analysis is strong enough to be genuinely explanatory. All the same, if these difficulties are correctable, there would seem to be nothing in principle against historical materialism. In particular, the interaction between two sorts of things does not seem to imply that the one sort of thing can not be said to determine the other.

NOTES


2Ibid., p. 32.


Cf. Cohen, pp. 113-14, 131-33 and W. H. Shaw, Marx’s Theory of History (Stanford: Stanford University Press, 1978), pp. 32-36. Cohen emphasizes the social aspect of the division of labor, since he wants to interpret Marx in the following way: the Utopia which Marx envisions in The German Ideology is possible only if suppressive social relations are loosened, allowing for the abolition of the division of labor, which in turn allows for doing away with the state.


Ibid., p. 160.


Ibid., p. 43.

Cohen, pp. 158-59.

Ibid., p. 150.

Ibid., p. 151.

Ibid., p. 160.

Ibid., p. 161.